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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,661	10/24/2003	Eizo Kawato	D-1535	6344
32628	7590	12/21/2004	EXAMINER	
HAUPTMAN KANESAKA BERNER PATENT AGENTS SUITE 300, 1700 DIAGONAL RD ALEXANDRIA, VA 22314-2848			BERMAN, JACK I	
			ART UNIT	PAPER NUMBER
			2881	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/691,661	KAWATO ET AL.	
	Examiner	Art Unit	
	Jack I. Berman	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim 5 is objected to because of the following informalities: There is no antecedent basis in the claim for "said gas". Appropriate correction is required.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Verentchikov et al. Verentchikov et al. discloses a mass spectroscope comprising:

- an ion source (32, 52) for generating ions,
- a mass spectrometry portion (39, 59) for analyzing the ions,
- an ion retention portion (36, 56) arranged between the ion source and the mass spectrometry portion for storing, cooling the ions and dissociating the ions (see lines 27-49 in column 12 and lines 30-40 in column 19),
- a gas supply connected to the ion retention portion for supplying a gas to the ion retention portion (not illustrated but inherently required as part of the pulsed gas inlet (35 (which injects gas into the ion retention portion by way of the ion source), 57) described in the patent),
- flow adjusting means comprising a pulse valve (see lines 54-59 in column 8) for quickly opening and closing gas flow from the gas supply disposed between the ion retention portion and the gas supply for adjusting a flow of the gas supplied to the ion retention portion, and
- control means (the coordination of the ion injection, retention, and extraction with the gas injection described in the patent inherently requires some type of control means) connected to the

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flow adjusting means for controlling the flow adjusting means to maintain an inner pressure of the ion retention portion according to operation modes at the ion retention portion, wherein said operation modes include an introducing operation in which the ion is introduced from the ion source into the ion retention portion, a retention operation in which the ion is stored, cooled and dissociated in the ion retention portion, and a discharging (extraction) operation in which the ion is discharged from the ion retention portion to the mass spectrometry portion, said control means controlling the flow adjusting means so that the gas pressure of the ion retention portion in the retention operation is higher than those in the introducing and discharging operations (again, see lines 27-49 in column 12 and lines 30-40 in column 19). Along with this “mass spectroscope” (which the patent refers to as a mass spectrometer), Verentchikov et al. also discloses a method for analyzing ions, comprising:

- generating the ions in an ion source,
- introducing the ions from the ion source into an ion retention portion,
- increasing a pressure in the ion retention portion by introducing a gas into the ion retention portion only while the ions are retained in the ion retention portion, and
- discharging the ions from the ion retention portion to a mass spectrometry portion for analyzing the ion after the pressure in the ion retention portion is decreased (again, see lines 27-49 in column 12 and lines 30-40 in column 19).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).


Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Verentchikov et al. The maintenance of a pressure of about 6×10^{-3} [Pa] (about 0.045 millitorr) in the retention operation instead of the pressure of about 3 millitorr (see lines 33-36 in column 15) given as an example by Verentchikov et al. would have been a matter of routine experimentation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack I. Berman whose telephone number is (571) 272-2468. The examiner can normally be reached on M-F (8:30-6:00) with every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (571) 272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jack I. Berman
Primary Examiner
Art Unit 2881

jb
12/12/04